

WHAT IS CLAIMED IS:

1. A substantially spherical porous silica particle having a diameter of from about 100 microns to about 3000 microns.
2. The particle of claim 1, wherein the particle has a diameter of at most about 1500 microns.
3. The particle of claim 1, wherein pores in the particle have a diameter of from about 20 nanometers to about 90 nanometers.
4. A composition, comprising:
a plurality of substantially spherical porous silica particles, at least some of the plurality of substantially spherical silica particles having a diameter of from about 100 microns to about 3000 microns; and
a carrier fluid, the plurality of substantially spherical porous particles being in the carrier fluid.
5. The composition of claim 4, wherein the carrier fluid comprises a saline solution.
6. The composition of claim 4, wherein the carrier fluid comprises a contrast agent.
7. The composition of claim 4, wherein at least some of the plurality of substantially spherical porous silica particles have a diameter of at most about 1500 microns.
8. The composition of claim 4, wherein, for at least some of the plurality of substantially spherical porous silica particles, pores in the substantially spherical porous silica particles have a diameter of from about 20 nanometers to about 90 nanometers.

9. The composition of claim 4, wherein, for at least some of the plurality of substantially spherical porous silica particles, a pore volume of the substantially spherical porous silica particles is from about 0.4 ml/g to about 1.6 ml/g.

10. The composition of claim 4, wherein the plurality of substantially spherical porous silica particles have a pore volume distribution such that about 70% or more of the pore volume of the plurality of substantially spherical porous silica particles is made up of pores having pore diameters which have a tolerance of about 10 nm or less on the mean pore diameter.

11. The composition of claim 4, wherein the substantially spherical porous silica particles exhibit a loss of attrition resistance of about 0.1% by weight or less.

12. The composition of claim 4, wherein at least some of the plurality of substantially spherical porous silica particles include a material selected from the group consisting of therapeutic agents, ferromagnetic materials, MRI visible materials and radiopaque materials.

13. The composition of claim 4, wherein the plurality of substantially spherical porous silica particles are sterilized.

14. A method, comprising:
administering to a subject a therapeutically effective amount of a composition including a plurality of substantially spherical porous silica particles in a carrier fluid, at least some of the plurality of substantially spherical porous silica particles having a diameter of from about 100 microns to about 3000 microns.

15. The method of claim 14, wherein the composition is administered to the subject by percutaneous injection.

16. The method of claim 14, wherein the composition is administered to the subject by a catheter.

17. The method of claim 14, wherein the composition is used to treat a cancer condition.

18. The method of claim 17, wherein the cancer condition is selected from the group consisting of ovarian cancer, colorectal cancer, thyroid cancer, gastrointestinal cancer, breast cancer, prostate cancer, lung cancer and combinations thereof.

19. The method of claim 18, wherein treating the cancer condition includes at least partially occluding a lumen in the subject that provides nutrients to a site of the cancer condition with at least some of the plurality of particles.

20. The method of claim 14, wherein the method includes at least partially occluding a lumen in the subject with at least some of a plurality of particles.